

# THE AMERICAN SOCIETY FOR MASS SPECTROMETRY

## The 1994 Research Award

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## FINNIGAN CORPORATION

presented to

**Evan R. Williams**, *University of California @ Berkeley*

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## The 1994 Research Award

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## The ASMS Research Fund

presented to

**Kimberly A. Prather**, *University of California @ Riverside*

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### Research Awards Sponsored by FINNIGAN CORPORATION

- 1986 Gregory I. Gellene  
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- 1993 Susan T. Graul  
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- 1986 Joseph J. Grabowski  
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*Purdue University*
- 1992 Vicki H. Wysocki  
*Virginia Commonwealth University*

### Research Awards Sponsored by ASMS RESEARCH FUND

- 1993 Robert J. Levis  
*Wayne State University*

## The American Society for Mass Spectrometry

proudly announces the selection of

**Donald F. Hunt**

as recipient of

**the 1994 Award for Distinguished Contribution to Mass Spectrometry**



The ASMS Award for a Distinguished Contribution in Mass Spectrometry recognizes a focused, singular achievement that significantly changes the practice of mass spectrometry. The 1994 Distinguished Contribution Award will be presented to Professor Donald F. Hunt of the University of Virginia. Prof. Hunt is acknowledged for his pioneering work in the development and application of negative ion chemical ionization (NICI) mass spectrometry, which was published as "Pulsed Positive Negative Ion Chemical Ionization Mass Spectrometry", *Analytical Chemistry*, **48**(14), 2098, 1976 and "Electron Capture Negative Ion Chemical Ionization Mass Spectrometry", *Analytical Chemistry*, **50**(13), 1781, 1978.

Building on fundamental studies, Hunt early on recognized the analytical potential of negative ion formation of small organic molecules. The Hunt group first (1976) developed and demonstrated a method of simultaneously recording positive and negative CI mass spectra, and observed that NICI yielded significantly increased ion current and unique structural information. Importantly, he also noted that enhanced detection sensitivity could be achieved for many organic molecules by derivatization to

yield species with increased electron affinity. Hunt then (1978) applied derivatization schemes and NICI to the analysis of drug molecules at femtogram levels. Hunt's development and demonstration of the analytical utility of electron capture NICI mass spectrometry has had a dramatic impact. His research yielded a technique that is a standard feature on commercial analytical mass spectrometers and a methodology that is widely used in the pharmaceutical industry, analytical toxicology and environmental analyses for the detection and quantitation of trace levels of a wide variety of organic molecules including drugs, drug metabolites and environmental contaminants.

This is the fifth ASMS Award for Distinguished Contribution in Mass Spectrometry. The recipient receives a \$3,000 cash award and a recognition plaque.

### Previous Award Recipients:

- 1990 Ronald D. Macfarlane, *Plasma Desorption Ionization*
- 1991 Michael Barber, *Fast Atom Bombardment Ionization*
- 1992 John B. Fenn, *Electrospray Ionization*
- 1993 Christie G. Enke and Richard A. Yost, *Triple Quadrupole Mass Spectrometer*